CLAIMS

What is claimed is:

1. A polymer composition comprising a propylene polymer having a melt flow index in the range from 4 to 120 decigrams/minute, di-t-amyl peroxide, and at least one decomposition product of said peroxide, whereby said composition has agreeable odor characteristics.

2. The composition of claim 1 wherein the propylene polymer is selected from the group consisting of homopolymeric polypropylene and copolymers of propylene with other copolymerizable monomers wherein greater than about 50% by weight of the copolymer is comprised of propylene moieties.

3. The composition of claim 2 wherein the propylene polymer is homopolymeric polypropylene.

4. The composition of claim 2 wherein the propylene polymer is a copolymer of propylene and at least one comonomer selected from the group consisting of ethylene, butylene, and 4-methyl-pentene-1.

5. The composition of claim 1 wherein at least one decomposition product of di-t-amyl peroxide is t-amyl alcohol.

6. The composition of claim 1 wherein the di-t-amyl peroxide is present in a range of from 200 to 2000 parts by weight per million parts by weight of the propylene polymer.

7. A method of manufacturing a shaped article comprising the steps of:

A) mixing a propylene polymer having a melt flow index in the range from 1 to 20 decigrams/minute with a vis-breaking amount of di-t-amyl peroxide,

B) heating the mixture at a temperature effective to decompose the di-t-amyl peroxide until the melt flow index is in the range of from 4 to 120 decigrams/minute, and

C) shaping an article comprising a mixture comprising the propylene polymer having a melt flow index in the range from 4 to 120 decigrams/minute, di-t-amyl peroxide, and decomposition products of said peroxide, whereby said article has agreeable odor characteristics.

8. The method of claim 7 wherein the propylene polymer is selected from the group consisting of homopolymeric polypropylene and copolymers of propylene with other copolymerizable monomers wherein greater than about 50% by weight of the copolymer is comprised of propylene moieties.

9. The method of claim 8 wherein the propylene polymer is homopolymeric polypropylene.

10. The method of claim 8 wherein the propylene polymer is a copolymer of propylene and at least one comonomer selected from the group consisting of ethylene, butylene, and 4-methyl-pentene-1.

11. The method of claim 7 wherein at least one decomposition product of di-t-amyl peroxide is t-amyl alcohol.

12. The method of claim 7 wherein the di-t-amyl peroxide is present in a range of from 200 to 2000 parts by weight per million parts by weight of the propylene polymer.

13. In a method for producing a controlled rheology propylene polymer, the improvement that comprises employing a vis-breaking amount of t-amyl peroxide to generate free radicals and produce t-amyl alcohol, whereby the pleasantness of the organoleptic qualities of the polymer is increased.